# ECONOMIC CONCEPTS RELEVANT TO THE COUNTY EXTENSION AGRICULTURAL AGENT IN IMPLEMENTING EDUCATIONAL CHANGE

by 7214

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# CHAPTER I

## INTRODUCTION

### I. PURPOSE AND NEED FOR THE STUDY

The purpose of this study was to identify some of the major concepts in the broad field of economics, which would be useful to the county extension agricultural agent in carrying out the county extension program.

The county extension agricultural agent's primary responsibility is that of education. He may use a variety of methods and he will have many different audiences. His understanding of various concepts will be useful regardless of his audiences. For example, the concept "opportunity costs" can apply to nearly everyone. This concept can be defined as the value of what is given up, when one's resources are used to attain an alternative goal. This resource may be time, money, energy or some other resource.

According to Johnie Christian we are witnessing a shift of emphasis from facts or information to concepts. He points out that facts are still important and provide the necessary background for conceptualizing; however, if teaching is carried only to the fact stage, students may not be able to

translate what they have learned into a useful form. Facts may change from time to time, while the concepts probably will not.[1]

It was felt that the extension agents were in a perfect position to know what concepts they have used and need in the county extension program. It was also felt that the opinions of the extension economists and economists on the research and teaching staff at Kansas State University would be valuable in this study.

The concepts, which were chosen for study, were taken from text books in the various fields of economics, and from other literature. Some economists from Kansas State University were consulted as to their opinion concerning the usefulness of these various economic concepts.

## II. BACKGROUND

A majority of men extension agents in Kansas hold Bachelor of Science degrees in agriculture. It is possible for a student to receive such a degree and take no more than one economics course. The in-service training program for extension agents could perhaps teach more economic concepts, which would be

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[1] Johnie Christian, "Need, Value and Use of Concepts," Issues in Family Economics Washington D.C.: American Home Economics Association 1967.

useful to the county extension program. Each year a limited number of extension agents take leave from their positions and enter a graduate program at a university. Most graduate courses are not specifically designed for extension agents and with a concept orientation could include more useful training for the extension agent.

## III. THEORETICAL ORIENTATION

The theoretical frame of reference for this study was based on the conceptual approach to learning and on the aspect of role theory.

The extension system of education as known today is made possible by the Smith-Lever Act of 1914 and ammended in 1953. This act in part states:

> In order to aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics,and to encourage the application of the same, there may be continued or inaugurated in connection with the college or colleges in each State, Territory or possession, now receiving or which may here-after receive, the benefits of the Morrill Land Grant College Act of 1862 and the Morrill College Endowment Act of 1890, agricultural extension work which shall be carried on in cooperation with the United States Department of Agriculture.....
>
> Cooperative agricultural extension work shall consist of the giving of instruction and practical demonstrations in agriculture and home economics and subjects relating thereto to persons not attending or resident in said colleges in the several communities, and imparting information on said subjects through demonstrations, publications, and otherwise, and for the necessary printing and distribution of information in connection with the foregoing; and this work shall be carried on in such manner as may be mutually agreed upon

by the Secretary of Agriculture and the state agricultural college or colleges receiving the benefits of this Act.[2]

Much of the instruction in agriculture and home economics mentioned in the above act is offered by the county extension agricultural agent through office calls, farm and home visits, mass media and other methods. The job of self education is a continuing process for an extension worker. He not only needs a well rounded formal education, but also he must keep abreast of new technology.

The conceptual approach to learning and the role theory is more fully covered in the review of literature.

## IV. OBJECTIVES

The objectives of this study were as follows:

1. To develop a list of economic concepts useful to the county extension agricultural agent.

2. To determine which economic concepts are most useful to the county extension agricultural agents.

3. To determine if there are relationships between emphasis placed on the usefulness of certain concepts to the county extension agricultural agent and such factors as age, education, tenure, position of the respondent, and years since receiving Bachelor of Science degrees.

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[2]Lincoln David Kelsey and Cannon Chiles Hearne, Cooperative Extension Work, (Ithaca, New York: Comstock Publishing Associates, 1955), pp. 21-29

## V. SCOPE AND PROCEDURE

This study is exploratory and descriptive. To the writers knowledge there has not previously been a study made of economic concepts involving county extension agricultural agents. There have, however, been a number of studies made investigating the concept approach both for extension education as well as for other uses. Barron and Hoff made a study in 1964 titled "Some Concepts Essential to a Basic Understanding of Economics."[3] This material was presented primarily for the teacher of high school economics. The five broad concepts covered included: scarcity, property, supply and demand, money and income.

Studies of concepts, involving the adult educators, include concepts in political science, [4] sociology,[5] and communications.[6] The results of a conference at Purdue University in 1966, "Concepts and Structure in the New Social Science Curricula," have also been published.[7]

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[3]J.F. Barron and Marilyn L. Hoff, "Some Concepts Essential to a Basic Understanding of Economics." Chicago: South-Western Publishing Co., 1964.

[4]Jack McCown and others, "Political Science Concepts Relevant to the Adult Educator." Raleigh: North Carolina State University, 1968.

[5]Frank A. Santopolo and Keith S. Beggs, "A Manuel of Sociological Concepts for Extension Workers." University of Kentucky, 1967.

[6]Douglas H. Pletsch and others, "Communication Concepts Used by Adult Educators in Agriculture to Implement Educational Change in Ohio." Columbus Ohio: Ohio State University, 1968.

[7]Irving Morrisset (Editor), "Concepts and Structure in the New Social Science Curricula." New York: Hold, Rinehart and Winston, Inc., 1967.

A mail questionaire was sent to extension agricultural agents in all 105 counties in Kansas, all extension economists, economists on the resident and teaching staff at Kansas State University, and all extension district supervisors.

The respondents were asked to rate twenty-five economic concepts as to their usefulness to the county extension agricultural agent in the county extension program.

One section of the questionaire also asked the respondents to indicate their present position, number of years since receiving their bachelor of science degree, the highest degree held, undergraduate, major, master of science major, doctoral major, age, etc. They were also asked if they had ever been a county extension agricultural agent.

Previously two extension economists and one economist on the resident staff at Kansas State University were asked to rank sixty economic concepts as to their value in the county extension program. The concepts with the lowest rank were eliminated from the list and not used on the questionaire. All information on the questionaire was pre-coded to facilitate analysis by use of computors.

# CHAPTER II

## REVIEW OF LITERATURE

### I. CONCEPTUAL APPROACH TO LEARNING

The research design of this study was based partially on other studies of concepts in the various social sciences.

Pletsch and others did a study in 1968 in Ohio on communication concepts used by adult educators in agriculture.[8] Twenty-seven communication concepts were chosen by the following procedure: (1) Asking authorities in the field of vocational agricultural and cooperative Extension to check concepts most important to the field. (2) Examining situations to determine those communication concepts by their presence contributed to the success of, or by their absence contributed to the failure of the incident. (3) Considering concepts used in the definitions of communications. (4) Examining the indexes of books written by specialists in communications to determine the important concepts. In the findings each concept was broken down as follows . . . . (1) naming the concept (2) relevance of the concept (3) definition of the concept.

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[8]Douglas H. Pletsch and others, "Communication Concepts Used by the Adult Educators in Agriculture to Implement Educational Change in Ohio," Columbus Ohio: Ohio State University, 1968.

A study on Political Science concepts was done by Jack McCown and others at North Carolina State University in 1968. These concepts were limited to those relevant to the adult educator.[9] These findings were broken down as follows . . . . (1) naming the concepts (2) situation (3) where to learn more about the concept (4) uses of concept. A total of twenty-one concepts were explored in this study.

Malcolm Guidy gleaned thirty-eight social change concepts from a publication "Increasing Knowledge in Social Science Among Agricultural Educators."[10] This was a final report of a research project funded by the U.S. Office of Education and conducted by the Louisiana State University Department of Agricultural Education. With each concept is the definition, example, and usefulness.

Considerable discussion on the conceptual approach to learning was held at an "Issues in Family Economics" conference at Louisiana State University in June of 1967. In pointing out the need, value,and use of concepts, Johnie Christian said, "The word "concept" is being widely used in academic circles. Today we hear a great deal of talk about teaching for concepts in mathematics, science, and in other areas of education. This represents a shift in emphasis, since until fairly recently the principal target was facts or information. Facts are still

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[9] Jack McCown and other, "Political Science Concepts Relevant to the Adult Educator," Raleigh: North Carolina State University, 1968.

[10] Malcolm Guidry, "Some Social Change Concepts," Louisiana State University, 1968.

important and provide the necessary background for conceptualizing. The point is, however, that if we only carry teaching to the fact stage, students may not be able to translate what they have learned into a useful form."[11]

Anita McCormick compiled a list of learning concepts at North Carolina State University in 1968. These concepts were listed under the main headings of cognitive domain, affective domain, and psychomotor domain. With each concept was the definition, situation, reference, where to learn more about the concept, and some uses.[12]

Many college text books teach subject matter concepts even though they are not normally referred to as concepts. Heady defines "variable costs" as those outlays which are a function of output in the production period.[13] He goes ahead to explain the various aspects of this concept. He describes the relationship between this concept and other costs concepts.

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[11]American Home Economics Association, Issues In Family Economics, Washington D. C. American Home Economics Association, 1967, pp. 30-31.

[12]Anita McCormick, "A Theory of Learning for the Adult Educator," Raleigh: North Carolina State University, 1968.

[13]Earl O. Heady, Economics of Agricultural Production and Resource Use.

Gordon defines conspicuous consumption as the consuming of wealth and services on a lavish scale for the purpose of demonstrating pecuniary power rather than satisfying an organic or cultural want.[14] The understanding of this concept would be most useful to the adult educator. It would help him to understand why some people would use their life's savings for a down payment on a new car, when they scarcely have enough to eat.

## II. THE ROLE CONCEPT

Since the main findings of this study were based on the results of questionaires sent to extension workers, the concept of "role" was investigated. According to Jacobson, Charters, and Lieberman:

> The definition of role in terms of shared expectations must take account of the question of whose expectations are relevant. We shall refer to the relevant populations as "criterion population." In hierarachical organizations at least three such groups should receive consideration. One is composed of persons who occupy like positions. Another is composed of persons who have a high degree of functional interdependence with the position in question. A third is composed of persons who do not have a direct functionally interdependent relationship with the position, but who nevertheless are related to it through a concern with the formulation and implementation of the broader purposes of the organization.[15]

The respondents in this survey could all be considered in the above three groups.

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[14]Leland L. Gordon, Economics for Consumer. Fourth Edition, (New York: American Book Co., 1961)

[15]Eugene Jacobson, S.C. Charters Jr., and Seymore Lieberman, "The Use of the Role Concept in the Study of Complex Organizations," Journal of Social Issues, VII, No. 3 (1951) , p. 20.

Jacobson, Charters, and Lieberman further stated:

> Another clue to the understanding of the attitudes and behavior of a person in an organization with a complex system of roles is furnished by a knowledge of positions he has occupied in the past. We have attempted to determine the extent to which past role behavior is reflected in current attitudes and perceptions by an intensive analysis of data about company foremen who previously had been union stewards. Two assumptions that indicated the analysis were (1) when people change to new positions, the attitudes and perceptions they operate with are in part a "carry-over" from their old role behaviors, and (2) people's experience in earlier positions provides a frame of reference for their adapting to new role expectations.[16]

Taking the above into consideration, the author asked each respondent to indicate on the questionaire whether they had ever been a county extension agricultural agent.

Gross, Mason, and McEachern have listed a number of definitions for the term "role." Roles were treated in three general categories.

The first category included the normative culture patterns. This includes attitudes, values and behavior ascribed by the society to any and all persons occupying this status. The role consists of what society expects of an individual occupying a given status.

In the second category the definition of role is treated as an individual's definition of his situation with reference to his and other's social positions. In this category a persons role is a pattern or type of social behavior which seems situationally appropriate to him in terms of the demands and expectations of those in his group.

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[16]Ibid., pp. 22-23

In the last category the definition of role consists of not what the occupant thinks he should nor what society thinks he should do, but what he actually does do as an occupant of the position.[17]

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[17]Neal Gross, Ward S. Mason and Alexander W. McEachern, Explorations in Role Analysis, (New York: John Wiley and Sons, Inc., 1958), pp. 12-15.

# CHAPTER III

## ANALYSIS OF DATA

This chapter presents an analysis of findings in this study. The purpose of the study was to identify some of the major concepts in the field of economics which would be useful to the county extension program.

### I. DESCRIPTION OF POPULATION

Respondents from whom this material was gathered included eighty county extension agricultural agents, eighteen farm management fieldmen, five district farm management specialists, (also known as area extension economists) ten other extension economists at Kansas State University, ten resident staff members in the economics department at Kansas State University, and six district extension supervisors at Kansas State University.

The number of questionairs sent to respondents in various positions and the percent returned were as follows:

| Position | Number sent | Number returned | Per cent returned |
|---|---|---|---|
| County extension agricultural agents | 101 | 80 | 79.2 |
| Farm mgt. fieldmen | 20 | 18 | 90 |
| Dist. farm mgt. specialists | 5 | 5 | 100 |
| Other extension economists | 10 | 10 | 100 |
| Resident teaching and research staff | 14 | 10 | 71.4 |
| District extension supervisors | 6 | 6 | 100 |
| Total | 156 | 129 | 82.7 |

Years since receiving bachelor degree. In approximate terms, thirteen per cent (seventeen) of the respondents had held their bachelor of science degrees five years or less, five per cent (seven) between six and ten years, and seventy-six per cent (ninety-eight) over ten years. Seven respondents did not indicate how long since they had received their bachelor of science degree.

Agricultural agent experience. Eighty-six per cent (one hundred and twelve) had experience as a county extension agricultural agent. Twelve per cent (fifteen) did not have such experience. Two respondents did not answer this question.

Academic degree. Approximately fifty-three per cent (sixty-nine) of the respondents held bachelor of science degrees, thirty-three per cent (forty-two) held masters of science degrees, and fourteen per cent (eighteen) held doctors degrees.

Academic majors. Approximately twenty-seven per cent (thirty-five) of the respondents held their bachelor of science degrees in animal science, twenty-three per cent (thirty) in agricultural economics, fifteen per cent (twenty) in agronomy, twenty-eight per cent (thirty-six) in agricultural education, and general agriculture, one per cent (one) in extension education, and three per cent (five ) in other majors. Two did not respond.

Sixty-nine respondents held masters of science degrees. Thirteen per cent (nine) were in animal science, thirty-five per cent (twenty-four) were in economics, three per cent (two) were in agronomy, six per cent (four) in agricultural education and general agriculture, twenty-eight per cent (nineteen) in extension education and three per cent (two) were in other majors. Nine respondents did not answer this question.

Eighteen respondents held doctors degrees. There were approximately ninety per cent (sixteen) in economics and ten per cent (two) in extension education.

Age. Of the one hundred and twenty-nine respondents, approximately eight per cent (eleven) were under twenty-six years of age, eighteen per cent (twenty-three) were between twenty-six and thirty-five, thirty-six per cent (forty-seven) were over forty-five years of age.

## II. METHOD OF RATING AND RANKING CONCEPTS

Respondents for this study were given a list of twenty-five economic concepts and asked to rate them for their value to the county extension agricultural agent. The choices included "no importance," "little importance," "important," and "of major importance." They were also asked to rank (one through five) the five concepts which they felt would be the most useful to the county extension agricultural agent.

A list was then made of the ten concepts (by personnel groups) that were named most often as being one of the five most important to county extension agricultural agents. Of the concepts ranked as the top ten most important by the county extension agricultural agents, eight were also ranked in the top ten by two other personnel groups.

It is possible for a concept not to have been ranked in the top ten most important but still have been rated as of major importance.

Weighted scores were calculated for all ratings given by the respondents. The value of one was given to "of no importance." two to "of little importance," three to "of some importance," four to "important," and five to "of major importance." All data were in percentages. This figure was multiplied by the weighted value for each rating. The total of these scores resulted in a weighted score.

For example, if all respondents in a specific group rated a concept as "of major importance," the concept would receive a rated score of 500 (100 per cent times the weighted value of five). If fifty per cent of the respondents rated a concept as of little importance and fifty per cent as of major importance, the weighted score would be 350.

## III. CONCEPTS AS RATED AND RANKED BY POSITION

Staff members in each position were asked to select the top five concepts in order of importance. The ten concepts most often mentioned by each group are discussed in this section of the study.

The rank order of the first ten economic concepts for each position are shown in Table I. A discussion of these concepts follows:

Diminishing returns. The concept, "diminishing return," may be defined as that situation when each additional unit of a variable factor adds less to the total output than the previous unit.

This concept was ranked as the fourth most important by the county extension agricultural agents, as shown in Table I. Twenty-three ranked it in the top five. Thirteen ranked this concept as either the most important or the second most important.

"Diminishing returns," was also ranked in the top ten by district farm management specialists, other extension economists, economists on the teaching and research staff, and district supervisors. Only farm management fieldmen did not rank it among the top ten.

Resident staff members and district supervisors give "diminishing returns," the highest rating, as shown in Table II. The lowest rating was given by farm management fieldmen.

Pure interest rate. "Pure interest rate," is the per cent interest calculated by dividing the credit charge by the average amount of money borrowed for a year. This concept was ranked as the eighth most important by county extension agricultural agents, as shown in Table I. Six agents ranked this concept as either the most important or the second most important. It was also ranked in the top ten by farm management fieldmen and district farm management specialists.

TABLE I

FIRST TEN ECONOMIC CONCEPTS AS RANKED BY KANSAS STATE UNIVERSITY PERSONNEL IN VARIOUS POSITIONS, 1970

| Rank Order | Position as Kansas State University | | | | | |
|---|---|---|---|---|---|---|
| | County Extension Agricultural Agent | Farm Management Fieldmen | District Farm Management Specialist | Other Extension Economists | Resident Staff | District Supervisor |
| 1 | Resource Allocation | Resource Allocation | Partial Budget | Marginal Physical Product | Diminishing Returns | Goal |
| 2 | Goal | Goal | Diminishing Returns | Elasticity of Demand | Marginal Physical Product | Comparative Advantage |
| 3 | Firm-Household Relationship | Fixed Costs | Fixed Costs | Opportunity Costs | Goal | Marginal Rate of Substitution |
| 4 | Diminishing Returns | Opportunity Costs | Opportunity Costs | Market Structure | Partial Budget | Market Structure |
| 5 | Fixed Costs | Countervailing Power | Risk | Diminishing Returns | Marginal Rate of Substitution | Diminishing Returns |
| 6 | Market Structure | Pure Interest Rate | Product Differentation | Fixed Costs | Factor-Product Relationship | Fixed Costs |
| 7 | Opportunity Costs | Partial Budget | Pure Interest Rate | Resource Allocation | Opportunity Costs | Elasticity of Demand |
| 8 | Pure Interest Rate | Discounting Revenue | Factor-Product Relationship | Goal | Resource Allocation | Countervailing Power |
| 9 | Comparative Advantage | Marginal Rate of Substitution | Comparative Advantage | Marginal Rate of Substitution | Elasticity of Demand | Discounting Revenue |
| 10 | Irrational Production | Comparative Advantage | Goal | Countervailing Power | Market Structure | Resource Allocation |

TABLE II

RATINGS OF THE CONCEPT "DIMINISHING RETURNS" FOR COUNTY EXTENSION WORK BY KANSAS STATE UNIVERSITY PERSONNEL, IN PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 1 | 1 | 5 | 35 | 57 | 100 | 443 |
| Farm Management Fieldmen N=18 | 0 | 6 | 0 | 44 | 50 | 100 | 438 |
| District Farm Management Specialist N=5 | 0 | 0 | 0 | 40 | 60 | 100 | 460 |
| Other Extension Economists N=10 | 0 | 0 | 0 | 40 | 60 | 100 | 460 |
| Resident Staff N=10 | 0 | 0 | 0 | 10 | 90 | 100 | 490 |
| District Supervisor N=6 | 0 | 0 | 0 | 17 | 83 | 100 | 483 |

Sixteen county extension agricultural agents ranked this concept among the top five most important.

The weighted score for the concept "pure interest rate," was highest for county extension agricultural agents and farm management fieldmen as shown in Table III. District supervisors had the lowest weighted score for this concept.

Fixed costs. "Fixed costs," may be defined as costs which do not vary with, or are not a function of, output.

"Fixed costs," was ranked as the fifth most important concept by the county extension agricultural agents. Eighteen ranked this concept as one of the five most important. Nine ranked it as either the most important or the second most important. This concept was also ranked in the top ten most important by farm management fieldmen, district farm management specialists, other extension economists and district supervisors.

District farm management specialists gave the highest rating to the concept, "fixed costs," of the position groups compared, as shown in Table IV. The lowest ratings were given by other extension economists and county extension agricultural agents.

Firm-household relationships. The concept, "Firm-household relationship," is defined as the setting of goals and maximization of satisfaction taking both the firm and the

TABLE III

RATINGS OF THE ECONOMIC CONCEPT "PURE INTEREST RATE" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, IN PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 1 | 1 | 10 | 26 | 61 | 100 | 442 |
| Farm Management Fieldmen N=18 | 0 | 6 | 11 | 33 | 50 | 100 | 437 |
| District Farm Management Specialist N=5 | 0 | 0 | 40 | 0 | 60 | 100 | 420 |
| Other Extension Economists N=10 | 0 | 0 | 10 | 50 | 40 | 100 | 430 |
| Resident Staff N=10 | 0 | 0 | 20 | 50 | 30 | 100 | 410 |
| District Supervisor N=6 | 0 | 0 | 33 | 33 | 34 | 100 | 396 |

TABLE IV

RATINGS OF THE ECONOMIC CONCEPT "FIXED COSTS" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, IN PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 2 | 2 | 7 | 34 | 54 | 100 | 433 |
| Farm Management Fieldmen N=18 | 0 | 6 | 0 | 28 | 67 | 100 | 459 |
| District Farm Management Specialist N=5 | 0 | 0 | 0 | 0 | 100 | 100 | 500 |
| Other Extension Economists N=10 | 10 | 0 | 0 | 40 | 50 | 100 | 420 |
| Resident Staff N=10 | 0 | 0 | 10 | 20 | 70 | 100 | 460 |
| District Supervisor N=6 | 0 | 0 | 0 | 33 | 67 | 100 | 467 |

family into consideration.

This concept was ranked as the third most important by county extension agricultural agents. Twenty-four county extension agricultural agents ranked this concept among the first five in order of importance. Thirteen ranked the concept as either most important or the second most important. It was not ranked in the top ten by any other position group.

The highest ratings were given by district supervisors and district farm management specialists, as shown in Table V. Resident staff members rated this concept considerably lower than any other group.

Irrational production. Irrational production," may be defined as that stage of production where resources can be rearranged to either give a greater product from the same amount of resources, or give the same product with a smaller aggregate outlay of fixed and variable resources.

This concept was ranked as the tenth most important by county extension agricultural agents. No other group ranked this concept as being among the top ten most important. Fifteen county extension agricultural agents ranked this concept in the top five most important concepts. Four ranked it as the most important or the second most important.

The concept, "irrational production," was given high ratings by district supervisors, district farm management

TABLE V

RATING OF THE ECONOMIC CONCEPT "FIRM-HOUSEHOLD RELATIONSHIP" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, IN PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 1 | 5 | 7 | 36 | 51 | 100 | 431 |
| Farm Management Fieldmen N=18 | 0 | 6 | 11 | 50 | 33 | 100 | 410 |
| District Farm Management Specialist N=5 | 0 | 0 | 0 | 40 | 60 | 100 | 460 |
| Other Extension Economists N=10 | 0 | 0 | 40 | 10 | 50 | 100 | 410 |
| Resident Staff N=10 | 0 | 0 | 40 | 40 | 20 | 100 | 380 |
| District Supervisor N=6 | 0 | 0 | 0 | 17 | 83 | 100 | 483 |

specialists, and other extension economists as shown in Table VI. Resident staff members and farm management fieldmen gave this concept a low rating.

Resource allocation. "Resource allocation," may be defined as the distribution of the available resources in a way that will maximize satisfaction.

This concept was ranked as one of the top five most important by forty per cent (thirty-four) of the eighty county extension agricultural agents answering the questionaire. Twenty-seven per cent (twenty-two) rated this concept as either the most important or the second most important.

It was also ranked as being among the top ten most important concepts by farm management fieldmen, other extension economists, resident staff members, and district supervisors, as shown in Table I.

District supervisors rated "resource allocation," higher than did any other group. District farm management specialists gave a much lower rating to this concept than did any other group, as shown in Table VII.

Goal. The concept, "goal," is defined as the end toward which efforts or ambitions are directed. Goals vary considerably among individuals. Any extension worker must take this fact into consideration when conducting an educational program.

This concept was ranked as the second most important by county extension agricultural agents, as shown in Table I.

TABLE VI

RATING OF THE ECONOMIC CONCEPT "IRRATIONAL PRODUCTION" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, IN PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 1 | 2 | 9 | 44 | 44 | 100 | 428 |
| Farm Management Fieldmen N=18 | 0 | 5 | 17 | 39 | 39 | 100 | 412 |
| District Farm Management Specialist N=5 | 0 | 0 | 0 | 40 | 60 | 100 | 460 |
| Other Extension Economists N=10 | 0 | 0 | 0 | 40 | 60 | 100 | 460 |
| Resident Staff N=10 | 0 | 0 | 20 | 50 | 30 | 100 | 410 |
| District Supervisor N=6 | 0 | 0 | 0 | 33 | 67 | 100 | 467 |

TABLE VII

RATINGS OF THE ECONOMIC CONCEPT "RESOURCE ALLOCATIONS" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, BY PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 2 | 2 | 11 | 38 | 46 | 100 | 421 |
| Farm Management Fieldmen N=18 | 0 | 0 | 11 | 39 | 50 | 100 | 439 |
| District Farm Management Specialist N=5 | 0 | 0 | 60 | 40 | 0 | 100 | 340 |
| Other Extension Economists N=10 | 0 | 0 | 10 | 40 | 50 | 100 | 440 |
| Resident Staff N=10 | 0 | 0 | 10 | 30 | 60 | 100 | 450 |
| District Supervisor N=6 | 0 | 0 | 0 | 33 | 67 | 100 | 467 |

Twenty-three of the eighty agents responding placed this concept among the top five. Seventeen considered it as either the most important or the second most important.

This concept was also ranked in the top ten most important by farm management fieldmen, district farm management specialists, other extension economists, resident staff members, and district supervisors.

Resident staff members and farm management fieldmen rated this concept the highest, as shown in Table VIII. County extension agricultural agents rated it the lowest.

Discounting revenue. "Discounting revenue," is the process of computing the present value of a future revenue.

This concept was ranked among the top ten most important concepts by farm management fieldmen and district supervisors, as shown in Table I. The other groups did not consider this concept as one of the ten most important.

The highest rating was given this concept by other extension economists, as shown in Table IX. Of the groups studied, district farm management specialists and county extension agricultural agents rated this concept the lowest.

Partial budget. "Partial budget," may be defined as the planning or budgeting of an enterprise when only a small number of segments are taken into consideration.

This concept was ranked in the top ten most important by farm management fieldmen, district farm management specialists

TABLE VIII

RATING OF THE ECONOMIC CONCEPT "GOAL" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, BY PER CENT OR RESPONSES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 1 | 4 | 13 | 46 | 36 | 100 | 415 |
| Farm Management Fieldmen N=18 | 0 | 0 | 11 | 17 | 72 | 100 | 461 |
| District Farm Management Specialist N=5 | 0 | 0 | 0 | 80 | 20 | 100 | 420 |
| Other Extension Economists N=10 | 0 | 0 | 40 | 20 | 40 | 100 | 400 |
| Resident Staff N=10 | 0 | 0 | 0 | 20 | 80 | 100 | 480 |
| District Supervisor N=6 | 0 | 0 | 0 | 50 | 50 | 100 | 450 |

TABLE IX

RATINGS OF THE ECONOMIC CONCEPT "DISCOUNTING REVENUE" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, BY PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 1 | 5 | 16 | 42 | 36 | 100 | 402 |
| Farm Management Fieldmen N=18 | 0 | 6 | 11 | 33 | 50 | 100 | 427 |
| District Farm Management Specialist N=5 | 0 | 0 | 0 | 100 | 0 | 100 | 400 |
| Other Extension Economists N=10 | 0 | 0 | 0 | 40 | 60 | 100 | 480 |
| Resident Staff N=10 | 0 | 10 | 10 | 50 | 30 | 100 | 400 |
| District Supervisor N=6 | 0 | 0 | 0 | 50 | 50 | 100 | 450 |

and resident staff members, as shown in Table I. Other groups did not rank this concept in the top ten most important.

District farm management specialists rated this concept the highest and other extension economists rated it the lowest, as shown in Table X.

Countervailing power. "Countervailing power," is the market power developed by individuals or groups to become more equal in market power to the large firms with which they must do business.

Farm management fieldmen, other extension economists and district supervisors considered this concept as one of the top ten most important, as shown in Table I. The other groups did not rank this concept among the top ten most important.

The highest rating was given this concept by district supervisors, as shown in Table XI. District farm management specialists rated it the lowest.

Elasticity of demand. "Elasticity of demand," may be defined as the relation between the proportional changes in price and quantity demanded, or the relative change in quantity bought resulting from a given relative change in price. If the response in quantity taken is relatively greater than the change in price, the demand is elastic. If the change in consumption

TABLE X

RATINGS OF THE ECONOMIC CONCEPT "PARTIAL BUDGET" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, IN PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 1 | 1 | 19 | 44 | 35 | 100 | 411 |
| Farm Management Fieldmen N=18 | 0 | 11 | 6 | 39 | 44 | 100 | 416 |
| District Farm Management Specialist N=5 | 0 | 0 | 0 | 20 | 80 | 100 | 480 |
| Other Extension Economists N=10 | 0 | 10 | 20 | 40 | 30 | 100 | 390 |
| Resident Staff N=10 | 0 | 10 | 10 | 40 | 40 | 100 | 410 |
| District Supervisor N=6 | 0 | 0 | 17 | 33 | 50 | 100 | 433 |

TABLE XI

RATINGS OF THE ECONOMIC CONCEPT "COUNTERVAILING POWER" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, IN PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 2 | 1 | 16 | 45 | 36 | 100 | 404 |
| Farm Management Fieldmen N=18 | 0 | 17 | 6 | 44 | 33 | 100 | 393 |
| District Farm Management Specialist N=5 | 0 | 20 | 0 | 80 | 0 | 100 | 360 |
| Other Extension Economists N=10 | 0 | 0 | 10 | 50 | 40 | 100 | 430 |
| Resident Staff N=10 | 0 | 0 | 30 | 50 | 20 | 100 | 390 |
| District Supervisor N=6 | 0 | 0 | 0 | 33 | 67 | 100 | 467 |

is not relatively sensitive to the change in price the demand is inelastic.

This concept was ranked as being among the top ten most important by other extension economists, resident staff members, and district supervisors, as shown in Table I. Personnel in other positions did not rank this concept among the top ten most important.

The concept, "elasticity of demand," was given the highest rating by other extension economists and resident staff members, as shown in Table XII. The lowest score was given by county extension agricultural agents.

Comparative advantage. "Comparative advantage," is the advantage in efficiency one has in producing one product compared to another product.

This concept was ranked as the ninth most important by county extension agricultural agents, as shown in Table I. It was also ranked in the top ten by farm management fieldmen, district farm management specialists,and district supervisors. Fourteen ranked this concept in the top five. Eight ranked it as either the most important or the second most important.

The highest ratings were given this concept by district supervisors, other extension economists, and resident staff members, as shown in Table XIII. District farm management specialists gave the lowest ratings.

TABLE XII

RATINGS OF THE ECONOMIC CONCEPT "ELASTICITY OF DEMAND" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, IN PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 1 | 11 | 14 | 38 | 36 | 100 | 398 |
| Farm Management Fieldmen N=18 | 0 | 6 | 11 | 50 | 33 | 100 | 410 |
| District Farm Management Specialist N=5 | 0 | 0 | 20 | 40 | 40 | 100 | 420 |
| Other Extension Economists N=10 | 0 | 0 | 0 | 40 | 60 | 100 | 460 |
| Resident Staff N=10 | 0 | 0 | 10 | 30 | 60 | 100 | 450 |
| District Supervisor N=6 | 0 | 0 | 17 | 50 | 33 | 100 | 416 |

TABLE XIII

RATINGS OF THE ECONOMIC CONCEPT "COMPARATIVE ADVANTAGE" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, IN PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 2 | 14 | 15 | 38 | 31 | 100 | 392 |
| Farm Management Fieldmen N=18 | 0 | 6 | 22 | 28 | 44 | 100 | 387 |
| District Farm Management Specialist N=5 | 0 | 0 | 20 | 80 | 0 | 100 | 380 |
| Other Extension Economists N=10 | 0 | 0 | 10 | 40 | 50 | 100 | 440 |
| Resident Staff N=10 | 0 | 0 | 20 | 20 | 60 | 100 | 440 |
| District Supervisor N=6 | 0 | 0 | 17 | 17 | 17 | 100 | 449 |

Factor-product relationship. "Factor-product relationship" is defined as the amount and nature of yield or product forthcoming as various quantities of labor, feed, fertilizer, or other factors of production are used on the farm or in other industries.

This concept was ranked among the top ten most important by district farm management specialists and resident staff members, as shown in Table I. Personnel in other positions did not rank this concept among the top ten most important.

Other extension economists and resident staff members rated this concept higher than did the other groups, as shown in Table XIV. Farm management fieldmen and county extension agricultural agents gave it the lowest ratings.

Marginal physical product. "Marginal physical product," is the change in total product produced for each unit change in resource added.

This concept was ranked among the top ten most important by other extension economists and resident staff members as shown in Table I. No other groups ranked this concept in the top ten.

Resident staff members rated this concept higher than any other group, as shown in Table XV. County extension agricultural agents, farm management fieldmen and district supervisors rated it lower than the other groups.

TABLE XIV

RATINGS OF THE ECONOMIC CONCEPT "FACTOR-PRODUCT RELATIONSHIP" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, BY PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 0 | 2 | 27 | 44 | 26 | 100 | 391 |
| Farm Management Fieldmen N=18 | 0 | 17 | 11 | 39 | 33 | 100 | 388 |
| District Farm Management Specialist N=5 | 0 | 0 | 0 | 40 | 60 | 100 | 460 |
| Other Extension Economists N=10 | 0 | 0 | 0 | 30 | 70 | 100 | 470 |
| Resident Staff N=10 | 0 | 0 | 0 | 30 | 70 | 100 | 470 |
| District Supervisor N=6 | 0 | 0 | 33 | 33 | 33 | 100 | 396 |

TABLE XV

RATINGS OF THE ECONOMIC CONCEPT "MARGINAL PHYSICAL PRODUCT" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, BY PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 0 | 7 | 20 | 54 | 19 | 100 | 389 |
| Farm Management Fieldmen N=18 | 0 | 6 | 17 | 60 | 17 | 100 | 392 |
| District Farm Management Specialist N=5 | 0 | 0 | 20 | 60 | 20 | 100 | 400 |
| Other Extension Economists N=10 | 0 | 0 | 0 | 50 | 50 | 100 | 450 |
| Resident Staff N=10 | 0 | 0 | 0 | 30 | 70 | 100 | 470 |
| District Supervisor N=6 | 0 | 17 | 0 | 66 | 17 | 100 | 387 |

Market structure. "Market structure," may be defined as the economically significant features of a market, which affect the behavior of firms in the industry supplying the market.

The concept was ranked as the sixth most important by county extension agricultural agents, as shown in Table I. Thirteen of the eighty agents ranked it as one of the five most important. Seven agents ranked it as the most important or the second most important. This concept was also ranked among the top ten most important by other extension economists, resident staff members, and district supervisors.

The concept, "market structure," was rated highest by district supervisors, and shown in Table XVI. Farm management fieldmen gave this concept the lowest rating.

Opportunity costs. "Opportunity costs," may be defined as the value of what is given up when one's resources are used to attain an alternative goal.

This concept was ranked as the seventh most important by the county extension agricultural agents, as shown in Table I. Thirteen ranked it as one of the five most important. Eight ranked it as the most important or the second most important. The concept, "opportunity costs," was also ranked among the top ten most important by farm management fieldmen, district farm management specialists, other extension economists, and resident staff members.

TABLE XVI

RATINGS OF THE ECONOMIC CONCEPT "MARKET STRUCTURE" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, BY PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 2 | 9 | 21 | 43 | 25 | 100 | 385 |
| Farm Management Fieldmen N=18 | 0 | 11 | 39 | 28 | 22 | 100 | 361 |
| District Farm Management Specialist N=5 | 0 | 0 | 20 | 60 | 20 | 100 | 400 |
| Other Extension Economists N=10 | 0 | 0 | 20 | 50 | 30 | 100 | 410 |
| Resident Staff N=10 | 0 | 10 | 20 | 50 | 20 | 100 | 380 |
| District Supervisor N=6 | 0 | 0 | 0 | 67 | 33 | 100 | 428 |

This concept received the highest rating from district farm management specialists and other extension economists, as shown in Table XVII. District supervisors and county extension agricultural agents rated it lower than any other group.

Marginal rate of substitution. "Marginal rate of substitution," is the amount by which one resource is decreased as imputs of another resource are increased by one unit, in a production practice.

This concept was ranked in the top ten by farm management fieldmen, other extension economists, resident staff members, and district supervisors,as shown in Table I. This concept was not ranked among the top ten by county extension agricultural agents and district farm management specialists, as shown in Table XVIII.

The highest rating for this concept was given by district supervisors and resident staff members. County extension agricultural agents gave it the lowest rating.

Risk. "Risk," may be defined as the variability of outcome, which is measurable in an emperical or quantitative manner. Risk differs from uncertainty in the respect that uncertainty can not be measured in an emperical or quantitative manner. District farm management specialists were the only group who ranked this concept in the top ten most important, as shown in Table I.

TABLE XVII

RATINGS OF THE ECONOMIC CONCEPT "OPPORTUNITY COSTS" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, BY PERCENTAGES, 1970

| Position | Type of Rating | | | | | | |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | Total Per Cent | Weighted Score |
| County Extension Agricultural Agent N=80 | 1 | 4 | 30 | 41 | 24 | 100 | 383 |
| Farm Management Fieldmen N=18 | 0 | 6 | 6 | 55 | 33 | 100 | 419 |
| District Farm Management Specialist N=5 | 0 | 0 | 10 | 10 | 80 | 100 | 470 |
| Other Extension Economists N=10 | 0 | 0 | 10 | 10 | 80 | 100 | 470 |
| Resident Staff N=10 | 0 | 0 | 30 | 30 | 40 | 100 | 410 |
| District Supervisor N=6 | 0 | 17 | 17 | 33 | 33 | 100 | 382 |

TABLE XVIII

RATINGS OF THE ECONOMIC CONCEPT "MARGINAL RATE OF SUBSTITUTION" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, BY PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 0 | 4 | 27 | 49 | 20 | 100 | 355 |
| Farm Management Fieldmen N=18 | 0 | 11 | 11 | 56 | 22 | 100 | 389 |
| District Farm Management Specialist N=5 | 0 | 0 | 0 | 80 | 20 | 100 | 420 |
| Other Extension Economists N=10 | 0 | 10 | 0 | 60 | 30 | 100 | 410 |
| Resident Staff N=10 | 0 | 0 | 10 | 40 | 50 | 100 | 440 |
| District Supervisor N=6 | 0 | 0 | 17 | 17 | 66 | 100 | 449 |

TABLE XIX

RATINGS OF THE ECONOMIC CONCEPT "RISK" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, BY PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 1 | 11 | 38 | 35 | 15 | 100 | 353 |
| Farm Management Fieldmen N=18 | 0 | 17 | 39 | 28 | 17 | 100 | 348 |
| District Farm Management Specialist N=5 | 0 | 0 | 40 | 40 | 20 | 100 | 380 |
| Other Extension Economists N=10 | 0 | 0 | 20 | 50 | 30 | 100 | 310 |
| Resident Staff N=10 | 0 | 20 | 20 | 40 | 20 | 100 | 360 |
| District Supervisor N=6 | 0 | 17 | 17 | 50 | 17 | 100 | 370 |

TABLE XX

RATINGS OF THE ECONOMIC CONCEPT "PRODUCT DIFFERENTATION" FOR COUNTY EXTENSION WORK BY KSU PERSONNEL IN VARIOUS POSITIONS, BY PERCENTAGES, 1970

| Position | Type of Rating | | | | | Total Per Cent | Weighted Score |
|---|---|---|---|---|---|---|---|
| | No Importance | Little Importance | Some Importance | Important | Major Importance | | |
| County Extension Agricultural Agent N=80 | 7 | 11 | 38 | 33 | 10 | 100 | 215 |
| Farm Management Fieldmen N=18 | 0 | 28 | 38 | 28 | 6 | 100 | 312 |
| District Farm Management Specialist N=5 | 0 | 40 | 0 | 40 | 20 | 100 | 340 |
| Other Extension Economists N=10 | 0 | 10 | 40 | 20 | 30 | 100 | 380 |
| Resident Staff N=10 | 0 | 10 | 50 | 30 | 10 | 100 | 340 |
| District Supervisor N=6 | 0 | 33 | 33 | 17 | 17 | 100 | 318 |

District farm management specialists rated this concept higher than any other group, as shown in Table XIX. Farm management fieldmen and county extension agricultural agents gave it the lowest ratings.

Product differentation. "Product differentation," is defined as the difference in design or physical quality of a product compared to that of a competing product.

This concept was ranked among the top ten most important by district farm management specialists, as shown in Table I. The other groups did not rank it as being among the top ten most important.

Other extension economists rated this concept higher than any other group, as shown in Table XX. County extension agricultural agents rated it considerable lower than the other groups.

## IV. CONCEPTS RATED BY YEARS SINCE RECEIVING BACHELOR OF SCIENCE DEGREE

The ratings of respondents were analyzed according to years since receiving their bachelor of science degrees. It was felt that there may have been a difference in ratings due to age of respondents and due to the various subject matter taught in their curriculum.

Table XXI shows the weighted scores of economic concepts according to years since receiving bachelor of science degrees. The concepts are listed according to the highest weighted scores of respondents who received their bachelors degrees more than ten years ago. This respondent group was used because it was the largest.

According to weighted scores the agreements between respondent groups varies from a difference of two for the concept "diminishing returns," to a difference of 143 between weighted scores for "irrational production." The difference in weighted scores was twenty-five or less for nine concepts and between twenty-five and fifty for an additional nine concepts.

The respondents who received their bachelors degrees six to ten years ago tended to give the concepts higher ratings than did those who had their degree less than six years or more than ten years. There were only seven respondents in this group, so perhaps they could not be considered representative of all respondents.

When only two groups (those receiving their bachelors degrees less than six years ago and those receiving their bachelors degrees more than ten years ago) were considered, the difference in weighted scores was twenty-five or less for nineteen concepts and between twenty-five and fifty for four more concepts.

The concept, "diminishing returns," received the highest weighted score from both groups. Other concepts placed in the top ten by both groups (according to weighted scores) are: "fixed costs," "pure interest rates," "firm-household relationships," "countervailing power," "goal," "discounting revenue," and "elasticity of demand."

Other concepts receiving high weighted scores by the less than six and the six to ten year groups included: "resource allocation and partial budget."

TABLE XXI

WEIGHTED SCORES OF ECONOMIC CONCEPTS FOR COUNTY EXTENSION WORK BY YEARS SINCE RECEIVING BACHELOR OF SCIENCE DEGREES, 1970

| | YEARS SINCE RECEIVING BACHELORS DEGREE | | | | | |
|---|---|---|---|---|---|---|
| | Less than Six N=17 | | Six to Ten N=7 | | More than Ten N=99 | |
| Economic Concept | Weighted Score | Rank Order | Weighted Score | Rank Order | Weighted Score | Rank Order |
| Diminishing Returns | 473 | 1 | 471 | 1&2 | 471 | 1 |
| Fixed Costs | 453 | 2 | 458 | 4 | 440 | 2 |
| Pure Interest Rate | 431 | 5 | 411 | | 438 | 3 |
| Firm-Household Relationships | 447 | 3 | 343 | | 428 | 4 |
| Countervailing Power | 411 | 9&10 | 415 | | 426 | 5 |
| Goal | 428 | 6 | 467 | 3 | 418 | 6 |
| Discounting Revenue | 417 | 8 | 443 | 5&6 | 413 | 7 |
| Factor-Product Relationships | 381 | | 418 | 10 | 412 | 8 |
| Elasticity of Demand | 411 | 9&10 | 429 | 7&8 | 408 | 9 |
| Comparative Advantage | 374 | | 343 | | 406 | 10 |
| Partial Budget | 425 | 7 | 425 | 9 | 405 | |
| Marginal Rate of Substitution | 370 | | 396 | | 401 | |

TABLE XXI (continued)

| | | | | | |
|---|---|---|---|---|---|
| Opportunity Costs | 400 | | 404 | | 400 |
| Marginal Rate of Substitution | 399 | | 429 | 7&8 | 392 |
| Market Structure | 389 | | 387 | | 382 |
| Resource Allocation | 433 | 4 | 471 | 1&2 | 373 |
| Perfect Competitor | 353 | | 387 | | 366 |
| Impulse Buying | 359 | | 357 | | 364 |
| Choice Indicator | 380 | | 350 | | 363 |
| Compounding Costs | 368 | | 385 | | 360 |
| Irrational Production | 300 | | 443 | 5&6 | 338 |
| Parity | 340 | | 385 | | 337 |
| Risk | 340 | | 386 | | 335 |
| Production Differentiation | 325 | | 299 | | 330 |
| Uncertainty | 294 | | 326 | | 320 |

## V. CONCEPTS RATED ACCORDING TO HIGHEST DEGREE HELD

Slightly over one half (53.5 per cent) of the 129 respondents answering the questionaire held bachelors degrees. Nearly one third (32.6 per cent) also held masters degrees. Almost fourteen per cent (13.9 per cent) held doctors degrees.

Table XXII shows the weighted scores of economic concepts, listed according to the highest weighted scores of the respondents holding only a bachelors degree, since this was the largest group.

The difference between weighted scores among respondent groups varied from seven for the concept "fixed costs," to 111 for the concept "factor-product relationships." The difference between weighted scores was twenty-five or less for seven concepts, and between twenty-six and fifty for an additional five concepts.

The concept "diminishing returns," received the highest weighted score by all three respondent groups. "Fixed costs," "resource allocation," and "goal," were concepts also rated among the ten highest rated concepts by all three respondent groups.

The following concepts were among those ten with the highest scores for both the respondents holding bachelors degrees and those holding masters degrees: "diminishing returns," "pure interest rate," "fixed costs," "firm-household relationships," "resource allocation," "irrational production," "goal," "discounting revenue, " and "partial budget."

Respondents holding doctors degrees gave high weighted scores to five concepts not rated highly by the other two respondent groups. They were: "factor-product relationships," "marginal physical product," "comparative advantage," "perfect competitor," and "opportunity costs."

TABLE XXII

WEIGHTED SCORES OF ECONOMIC CONCEPTS FOR COUNTY EXTENSION WORK ACCORDING TO HIGHEST DEGREE HELD, 1970

| Economic Concept | HIGHEST DEGREE HELD: Bachelor of Science N=69 Weighted Score | Rank Order | Master of Science N=42 Weighted Score | Rank Order | Doctors N=18 Weighted Score | Rank Order |
|---|---|---|---|---|---|---|
| Diminishing Returns | 448 | 1 | 441 | 1&2 | 478 | 1 |
| Pure Interest Rate | 442 | 2 | 426 | 5 | 427 | |
| Fixed Costs | 440 | 3 | 441 | 1&2 | 447 | 8 |
| Firm-Household Relationships | 434 | 4 | 427 | 6 | 394 | |
| Resource Allocation | 432 | 5 | 413 | 7 | 450 | 6&7 |
| Irrational Production | 426 | 6 | 436 | 4 | 438 | |
| Goal | 425 | 7 | 411 | 8 | 456 | 5 |
| Countervailing Power | 417 | 8 | 395 | | 407 | |
| Discounting Revenue | 415 | 9 | 406 | 10 | 425 | |
| Partial Budget | 407 | 10 | 437 | 3 | 361 | |
| Elasticity of Demand | 306 | | 407 | 9 | 466 | 3 |
| Comparative Advantage | 388 | | 397 | | 450 | 6&7 |
| Marginal Rate of Substitution | 385 | | 393 | | 436 | |

TABLE XXII (continued)

| | | | | |
|---|---|---|---|---|
| Opportunity Costs | 383 | 404 | 439 | 10 |
| Market Structure | 380 | 368 | 416 | |
| Marginal Physical Product | 379 | 389 | 461 | 4 |
| Impulse Buying | 375 | 347 | 360 | |
| Perfect Competitor | 367 | 348 | 445 | 9 |
| Factor-Product Relationships | 361 | 372 | 472 | 2 |
| Compounding Costs | 359 | 375 | 354 | |
| Choice Indicator | 359 | 360 | 412 | |
| Risk | 351 | 346 | 405 | |
| Parity | 337 | 350 | 339 | |
| Product Differentiation | 321 | 324 | 383 | |
| Uncertainty | 316 | 312 | 383 | |

# CHAPTER IV

# SUMMARY AND CONCLUSIONS

## SUMMARY

The purpose of this study was to identify some of the major concepts in economics, which would be useful to the county extension agricultural agent in carrying out the county extension program. The concepts, which were chosen for study, were taken from text books in the various fields of economics and from other literature.

The research design of this study was based partially on the studies of concepts in the various social sciences. The word, "concept," is being widely used in education today. Until recently the principal goal of education was facts or information. Facts may change with time. However, a concept will usually remain relevant, even though the facts that one uses to understand it change. Concepts provide an opportunity for lifelong learning because the learner has an organizational structure to which he can associate, classify and relate new information.

A questionnaire was sent to all Kansas county extension agricultural agents, farm management fieldmen, district extension economists, other extension economists, agricultural economists on the teaching and research staff at Kansas State University, and district extension supervisors.

This questionnaire included twenty-five economic concepts. Respondents were asked to rate these concepts as to their value to the county extension agricultural agent. The choices were "of no importance," "of little importance," "of some importance," "important," and "of major importance." They were also asked to select the five concepts which they felt were of the most value to the county extension agricultural agent, and to rank these concepts one through five.

A list was made of the ten concepts, for each personnel group that were named most often as being important to the county extension agricultural agent.

Independent variables included: present position of the respondent, number of years since respondent received his bachelors degree, highest degree held, undergraduate major, and at the masters degree level.

Weighted scores were calculated for all ratings given by the respondents. Concepts were listed according to weighted scores by the variables: position, years since receiving bachelors degree and highest degree held. Generally the personnel groups which ranked certain concepts highly also gave a high rating to the same concepts, resulting in a high weighted score for these concepts. It is possible for a concept to receive a high rating without being ranked among the top ten most important concepts. For example, respondents could feel that all concepts

mentioned were very important, and rate them accordingly. However, when forced to rank the concepts, they had to select the ones which they felt were most important.

The variable "years since receiving bachelors degree," was broken into "less than six," "six to ten," and "more than ten." The respondents who received their bachelors degree between six and ten years ago tended to give the concepts a higher rating than did those who had their degrees less than six years, or more than ten years. When only two groups, those receiving their bachelors degrees more than ten years ago, were considered, they agreed upon eight of the ten highest rated concepts. The concepts were, "diminishing returns," "fixed costs," "pure interest rates," "firm-household relationships," "countervailing power," "goal," "discounting revenue," and "elasticity of demand."

"Goal," was the only concept, that was ranked in the top ten by all personnel groups. The concepts, "resource allocation," "fixed costs," "diminishing return," and "opportunity costs," were ranked in the top ten by five groups. Those concepts ranked in the top ten by four personnel groups were: "comparative advantage," "marginal rate of substitution," and "market structure." "Partial budget," "pure interest rate," and "elasticity of demand," were ranked in the high ten by three position groups.

Because of their similarity in training and experiences, certain personnel groups might be expected to rank the same concepts highly. Two of these positions are "other extension

economists," and "economists on the resident staff." These two position groups agreed on eight of the ten high concepts. These concepts were: "marginal physical product," "elasticity of demand," "opportunity costs," "market structure," "diminishing returns," "resource allocation," "goal," and "marginal rate of substitution." Two other groups with similiar training and background were county extension agricultural agents and farm management fieldmen. These two groups agreed on six of the most highly ranked concepts. The concepts were: "resource allocation," "goal," "fixed costs," "opportunity costs," "pure interest rate," and "comparative advantage."

Concepts were also rated according to the highest degree held by the respondents. Regardless of degree, the concepts: "diminishing returns," "fixed costs," "resource allocation," and "goal," were rated among the ten highest rated concepts. The following concepts were among those ten with the highest weighted scores by both the respondents holding bachelors degrees and those holding masters degrees: "diminishing returns," "pure interest rate," "fixed costs," "firm-household relationships," "resource allocation," "irrational production," "goal," "discounting revenue," and "partial budget."

Respondents holding doctors degrees gave high weighted scores to five concepts not rated highly by the other two respondent groups. These concepts were: "factor-product relationship," "marginal physical product," "comparative

advantage," "perfect competitor," and "opportunity costs."

## CONCLUSIONS

The conclusions reached as a result of this study were:

1) Certain economic concepts were generally rated highly by nearly all respondent groups. They are: "resource allocation, goal, firm-household relations, diminishing returns, fixed costs, and pure interest rate."
2) Those concepts receiving a high rank order from the position group, also tended to receive a high rating from the various respondent groups.
3) Further study is indicated concerning the possibility of teaching some of the higher rated concepts in agent training sessions.
4) Further study is indicated to determine to what extent the higher rated concepts are used by county extension agricultural agents.
5) Further study is indicated to determine to what extent economic concepts are being taught at Kansas State University.

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# APPENDIX

TABLE XXVII

RATING OF ECONOMIC CONCEPTS FOR COUNTY EXTENSION WORK ACCORDING TO YEARS SINCE RECEIVING BACHELOR OF SCIENCE DEGREE BY PERCENTAGES, 1970

| Rating of Economic Concepts | Years since receiving Bachelor's Degree: Less than six N=17 | Six to ten N=7 | More than ten N=99 |
|---|---|---|---|
| **UNCERTAINTY** | | | |
| No Importance | 12 | 14 | 5 |
| Little or Some Importance | 59 | 29 | 53 |
| Important or of Major Importance | 29 | 57 | 42 |
| **IRRATIONAL PRODUCTION** | | | |
| No Importance | 0 | 0 | 1 |
| Little or Some Importance | 12 | 14 | 10 |
| Important or of Major Importance | 88 | 86 | 89 |
| **PARITY** | | | |
| No Importance | 6 | 0 | 9 |
| Little or Some Importance | 47 | 29 | 43 |
| Important or of Major Importance | 47 | 71 | 48 |
| **FACTOR-PRODUCT RELATIONSHIP** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 35 | 29 | 19 |
| Important or of Major Importance | 65 | 71 | 81 |

TABLE XXVII (continued)

| Rating of Economic Concepts | Years since receiving Bachelor's Degree: Less than six N=17 | Six to ten N=7 | More than ten N=99 |
|---|---|---|---|
| **PARTIAL BUDGET** | | | |
| No Importance | 0 | 0 | 1 |
| Little or Some Importance | 12 | 14 | 21 |
| Important or of Major Importance | 88 | 86 | 78 |
| **FIRM HOUSEHOLD RELATIONSHIPS** | | | |
| No Importance | 0 | 0 | 1 |
| Little or Some Importance | 6 | 57 | 16 |
| Important or of Major Importance | 94 | 43 | 83 |
| **CHOICE INDICATOR** | | | |
| No Importance | 0 | 14 | 5 |
| Little or Some Importance | 12 | 29 | 34 |
| Important or of Major Importance | 88 | 57 | 61 |
| **RISK** | | | |
| No Importance | 0 | 0 | 1 |
| Little or Some Importance | 47 | 14 | 48 |
| Important or of Major Importance | 53 | 86 | 51 |

TABLE XXVII (continued)

| Rating of Economic Concepts | Years since receiving Bachelor's Degree: Less than six N=17 | Six to ten N=7 | More than ten N=99 |
|---|---|---|---|
| **PURE INTEREST RATE** | | | |
| No Importance | 0 | 0 | 1 |
| Little or Some Importance | 6 | 29 | 17 |
| Important or of Major Importance | 94 | 71 | 72 |
| **IMPULSE BUYING** | | | |
| No Importance | 6 | 0 | 2 |
| Little or Some Importance | 41 | 43 | 42 |
| Important or of Major Importance | 53 | 57 | 56 |
| **DIMINISHING RETURNS** | | | |
| No Importance | 1 | 0 | 1 |
| Little or Some Importance | 6 | 0 | 6 |
| Important or of Major Importance | 93 | 100 | 93 |
| **MARGINAL RATE OF SUBSTITUTION** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 24 | 14 | 25 |
| Important or of Major Importance | 76 | 86 | 75 |

TABLE XXVII (continued)

| Rating of Economic Concepts | Years since receiving Bachelor's Degree: Less than six N=17 | Six to ten N=7 | More than ten N=99 |
|---|---|---|---|
| **COMPARATIVE ADVANTAGE** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 35 | 57 | 21 |
| Important or of Major Importance | 65 | 43 | 77 |
| **MARGINAL PHYSICAL PRODUCT** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 24 | 14 | 21 |
| Important or of Major Importance | 76 | 86 | 79 |
| **DISCOUNTING REVENUE** | | | |
| No Importance | 6 | 0 | 0 |
| Little or Some Importance | 6 | 0 | 19 |
| Important or of Major Importance | 88 | 100 | 81 |
| **COMPOUNDING COSTS** | | | |
| No Importance | 12 | 0 | 4 |
| Little or Some Importance | 18 | 29 | 32 |
| Important or of Major Importance | 70 | 71 | 64 |

TABLE XXVII (continued)

| Rating of Economic Concepts | Years since receiving Bachelor's Degree: Less than six N=17 | Six to ten N=7 | More than ten N=99 |
|---|---|---|---|
| **OPPORTUNITY COSTS** | | | |
| No Importance | 0 | 0 | 1 |
| Little or Some Importance | 35 | 29 | 26 |
| Important or of Major Importance | 65 | 71 | 73 |
| **FIXED COSTS** | | | |
| No Importance | 0 | 0 | 3 |
| Little or Some Importance | 0 | 14 | 8 |
| Important or of Major Importance | 100 | 86 | 89 |
| **COUNTERVAILING POWER** | | | |
| No Importance | 0 | 0 | 2 |
| Little or Some Importance | 12 | 14 | 19 |
| Important or of Major Importance | 88 | 86 | 79 |
| **MARKET STRUCTURE** | | | |
| No Importance | 6 | 14 | 0 |
| Little or Some Importance | 24 | 14 | 34 |
| Important or of Major Importance | 70 | 62 | 66 |

TABLE XXVII (continued)

| Rating of Economic Concepts | Years since receiving Bachelor's Degree: Less than six N=17 | Six to ten N=7 | More than ten N=99 |
|---|---|---|---|
| **PERFECT COMPETITOR** | | | |
| No Importance | 0 | 0 | 2 |
| Little or some Importance | 53 | 29 | 36 |
| Important or of Major Importance | 47 | 71 | 62 |
| **PRODUCT DIFFERENTIATION** | | | |
| No Importance | 0 | 14 | 5 |
| Little or Some Importance | 71 | 57 | 49 |
| Important or of Major Importance | 29 | 29 | 46 |
| **GOAL** | | | |
| No Importance | 0 | 0 | 1 |
| Little or Some Importance | 21 | 0 | 15 |
| Important or of Major Importance | 79 | 100 | 84 |
| **RESOURCE ALLOCATION** | | | |
| No Importance | 0 | 0 | 2 |
| Little or Some Importance | 14 | 0 | 15 |
| Important or of Major Importance | 86 | 100 | 83 |

TABLE XXVII (continued)

| Rating of Economic Concepts | Years since receiving Bachelor's Degree: Less than six N=17 | Six to ten N=7 | More than ten N=99 |
|---|---|---|---|
| ELASTICITY OF DEMAND | | | |
| No Importance | 0 | 0 | 1 |
| Little or Some Importance | 24 | 14 | 20 |
| Important or of Major Importance | 76 | 86 | 79 |

TABLE XXVIII

RATING OF ECONOMIC CONCEPTS FOR COUNTY EXTENSION WORK ACCORDING TO HIGHEST DEGREE HELD, BY PERCENTAGES, 1970

| Rating of Economic Concepts | Highest degree held | | |
|---|---|---|---|
| | Bachelors degree N=69 | Masters degree N=42 | Doctors degree N=18 |
| **COMPARATIVE ADVANTAGE** | | | |
| No Importance | 1 | 2 | 0 |
| Little or Some Importance | 29 | 27 | 11 |
| Important or of Major Importance | 70 | 71 | 89 |
| **MARGINAL PHYSICAL PRODUCT** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 27 | 21 | 0 |
| Important or of Major Importance | 73 | 79 | 100 |
| **DISCOUNTING REVENUE** | | | |
| No Importance | 1 | 0 | 0 |
| Little or Some Importance | 15 | 22 | 12 |
| Important or of Major Importance | 84 | 78 | 88 |
| **COMPOUNDING COSTS** | | | |
| No Importance | 4 | 7 | 0 |
| Little or Some Importance | 32 | 27 | 33 |
| Important or of Major Importance | 64 | 66 | 67 |

TABLE XXVIII (continued)

| Rating of Economic Concepts | Highest degree held: Bachelors degree N=69 | Masters degree N=42 | Doctors degree N=18 |
|---|---|---|---|
| **PURE INTEREST RATE** | | | |
| No Importance | 2 | 0 | 0 |
| Little or Some Importance | 10 | 23 | 17 |
| Important or of Major Importance | 88 | 77 | 83 |
| **IMPULSE BUYING** | | | |
| No Importance | 1 | 5 | 0 |
| Little or Some Importance | 36 | 45 | 56 |
| Important or of Major Importance | 63 | 50 | 44 |
| **DIMINISHING RETURNS** | | | |
| No Importance | 0 | 2 | 0 |
| Little or Some Importance | 5 | 4 | 0 |
| Important or of Major Importance | 95 | 94 | 100 |
| **MARGINAL RATE OF SUBSTITUTION** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 27 | 26 | 12 |
| Important or of Major Importance | 73 | 74 | 88 |

TABLE XXVIII (continued)

| Rating of Economic Concepts | Highest degree held: Bachelors degree N=69 | Masters degree N=42 | Doctors degree N=18 |
|---|---|---|---|
| **UNCERTAINTY** | | | |
| No Importance | 7 | 5 | 0 |
| Little or Some Importance | 56 | 60 | 28 |
| Important or of Major Importance | 37 | 35 | 72 |
| **IRRATIONAL PRODUCTION** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 13 | 12 | 6 |
| Important or of Major Importance | 87 | 88 | 94 |
| **PARITY** | | | |
| No Importance | 10 | 5 | 11 |
| Little or Some Importance | 42 | 40 | 50 |
| Important or of Major Importance | 48 | 55 | 39 |
| **FACTOR-PRODUCT RELATIONSHIP** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 32 | 21 | 0 |
| Important or of Major Importance | 68 | 79 | 100 |

TABLE XXVIII (continued)

| Rating of Economic Concepts | Highest degree held: Bachelors degree N=69 | Masters degree N=42 | Doctors degree N=18 |
|---|---|---|---|
| **PARTIAL BUDGET** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 19 | 17 | 28 |
| Important or of Major Importance | 81 | 83 | 72 |
| **FIRM-HOUSEHOLD RELATIONSHIPS** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 12 | 14 | 39 |
| Important or of Major Importance | 88 | 86 | 61 |
| **CHOICE INDICATOR** | | | |
| No Importance | 4 | 2 | 6 |
| Little or Some Importance | 39 | 40 | 11 |
| Important or of Major Importance | 57 | 58 | 83 |
| **RISK** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 51 | 52 | 17 |
| Important or of Major Importance | 49 | 48 | 83 |

TABLE XXVIII (continued)

| Rating of Economic Concepts | Highest degree held: Bachelors degree N=69 | Masters degree N=42 | Doctors degree N=18 |
|---|---|---|---|
| **PERFECT COMPETITOR** | | | |
| No Importance | 0 | 5 | 0 |
| Little or Some Importance | 43 | 40 | 11 |
| Important or of Major Importance | 57 | 55 | 89 |
| **PRODUCT DIFFERENTIATION** | | | |
| No Importance | 4 | 5 | 0 |
| Little or Some Importance | 54 | 60 | 39 |
| Important or of Major Importance | 42 | 35 | 61 |
| **GOAL** | | | |
| No Importance | 0 | 0 | 0 |
| Little or Some Importance | 13 | 21 | 11 |
| Important or of Major Importance | 87 | 79 | 89 |
| **RESOURCE ALLOCATION** | | | |
| No Importance | 0 | 2 | 0 |
| Little or Some Importance | 13 | 17 | 11 |
| Important or of Major Importance | 87 | 81 | 89 |

TABLE XXVIII (continued)

| Rating of Economic Concepts | Highest degree held: Bachelors degree N=69 | Masters degree N=42 | Doctors degree N=18 |
|---|---|---|---|
| **OPPORTUNITY COSTS** | | | |
| No Importance | 1 | 0 | 0 |
| Little or Some Importance | 27 | 29 | 22 |
| Important or of Major Importance | 72 | 71 | 78 |
| **FIXED COSTS** | | | |
| No Importance | 1 | 2 | 6 |
| Little or Some Importance | 7 | 10 | 6 |
| Important or of Major Importance | 92 | 88 | 88 |
| **COUNTERVAILING POWER** | | | |
| No Importance | 1 | 2 | 0 |
| Little or Some Importance | 14 | 22 | 22 |
| Important or of Major Importance | 85 | 76 | 78 |
| **MARKET STRUCTURE** | | | |
| No Importance | 3 | 0 | 0 |
| Little or Some Importance | 28 | 41 | 17 |
| Important or of Major Importance | 69 | 59 | 83 |

TABLE XXVIII (continued)

| Rating of Economic Concepts | Highest degree held: Bachelors degree N=69 | Masters degree N=42 | Doctors degree N=18 |
|---|---|---|---|
| ELASTICITY OF DEMAND | | | |
| No Importance | 0 | 2 | 0 |
| Little or Some Importance | 28 | 15 | 6 |
| Important or of Major Importance | 72 | 83 | 94 |

TABLE XXIX

WEIGHTED SCORES OF ECONOMIC CONCEPTS FOR COUNTY EXTENSION WORK ACCORDING TO MAJOR AT MASTERS DEGREE LEVEL, 1970

| | MASTERS DEGREE MAJOR | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Animal Science N=9 | | Economics N=24 | | Extension Education N=19 | | Other N=8 | |
| Economic Concept | Wt. Score | Rank Order | Wt. Score | Rank Order | Wt. Score | Rank Order | Wt. Score | Rank Order |
| Discounting Revenue | 345 | | 474 | 1 | 421 | 6 | 400 | |
| Diminishing Returns | 434 | 2 | 467 | 2 | 438 | 2 | 475 | 2&3&4 |
| Factor-Product Relationship | 411 | 3&4 | 455 | 3 | 400 | | 425 | |
| Marginal Physical Product | 374 | 9 | 454 | 4 | 385 | | 400 | |
| Opportunity Costs | 363 | 10&11 | 450 | 5 | 399 | | 425 | |
| Elasticity of Demand | 363 | 10&11 | 445 | 6 | 418 | 7 | 425 | |
| Irrational Production | 411 | 3&4 | 442 | 7 | 436 | 3 | 450 | 7&8&9 |
| Resource Allocation | 400 | 7 | 441 | 8 | 406 | 10 | 462 | 5&6 |
| Fixed Costs | 445 | 1 | 438 | 9 | 427 | 5 | 475 | 2&3&4 |
| Goal | 307 | | 437 | 10 | 412 | 9 | 450 | 7&8&9 |
| Marginal Rate of Substitution | 345 | | 434 | | 396 | | 375 | |

TABLE XXIX (continued)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Comparative Advantage | 341 | | 433 | 399 | | 437 | 10 |
| Perfect Competitor | 319 | | 425 | 400 | | 344 | |
| Partial Budget | 407 | 5&6 | 417 | 417 | 8 | 487 | 1 |
| Market Structure | 386 | 8 | 409 | 400 | | 371 | |
| Choice Indicator | 341 | | 409 | 286 | | 412 | |
| Pure Interest Rate | 407 | 5&6 | 408 | 447 | 1 | 462 | 5&6 |
| Counter-vailing Power | 330 | | 396 | 366 | | 425 | |
| Firm-Household Relationship | 330 | | 395 | 430 | 4 | 475 | 2&3&4 |
| Risk | 367 | | 378 | 352 | | 375 | |
| Uncertainty | 309 | | 378 | 314 | | 450 | 7&8&9 |
| Compounding Costs | 279 | | 363 | 388 | | 387 | |
| Product Different-iation | 319 | | 361 | 305 | | 387 | |
| Impulse Buying | 297 | | 335 | 374 | | 412 | |
| Parity | 301 | | 333 | 373 | | 350 | |

TABLE XXX

WEIGHTED SCORES OF ECONOMIC CONCEPTS FOR COUNTY EXTENSION WORK ACCORDING TO UNDERGRADUATE MAJOR, 1970

| Economic Concept | UNDERGRADUATE MAJOR | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Animal Science N=35 | | Economics N=30 | | Agronomy N=20 | | Agri'l. Ed. And Gen. Ag. N=36 | | Other N=6 | |
| | Wt. Score | Rank Order | Wt. Score | Rank Order | Wt. Score | Rank Order | Wt. Score | Rank Order | Wt. Score | Rank Order |
| Diminishing Returns | 457 | 4 | 464 | 1 | 450 | 4 | 445 | 1 | 417 | |
| Firm-Household Relationships | 444 | 6 | 421 | 8 | 445 | 5 | 439 | 2 | 433 | 5-11 |
| Irrational Production | 445 | 5 | 427 | 6 | 420 | 8-11 | 434 | 3 | 400 | |
| Elasticity of Demand | 430 | 8 | 420 | 9 | 405 | | 430 | 4 | 450 | 3&4 |
| Resource Allocation | 432 | 7 | 438 | 2 | 420 | 8-11 | 421 | 5 | 483 | 2 |
| Fixed Costs | 474 | 1 | 392 | | 471 | 2 | 420 | 6 | 500 | |
| Pure Interest Rate | 464 | 3 | 415 | | 422 | 7 | 408 | 7 | 417 | |
| Goal | 429 | 9 | 430 | 4 | 435 | 6 | 405 | 8 | 500 | 1 |
| Discounting Revenue | 423 | | 400 | | 420 | 8-11 | 403 | 9 | 417 | |
| Opportunity Costs | 408 | | 401 | | 385 | | 397 | 10&11 | 417 | |
| Countervailing Power | 402 | | 414 | | 460 | 3 | 397 | 10&11 | 433 | 5-11 |
| Marginal Rate of Substitution | 472 | 2 | 424 | 7 | 380 | | 393 | | 433 | 5-11 |
| Partial Budget | 426 | 10 | 434 | 3 | 395 | | 391 | | 450 | 3&4 |
| Marginal Physical Product | 406 | | 417 | 10 | 375 | | 380 | | 417 | |
| Market Structure | 395 | | 409 | | 355 | | 376 | | 417 | |
| Comparative Advantage | 394 | | 414 | | 420 | 8-11 | 372 | | 433 | 5-11 |
| Factor-Product Relationship | 417 | | 428 | 5 | 410 | | 366 | | 433 | 5-11 |
| Choice Indicator | 347 | | 383 | | 480 | 1 | 361 | | 433 | 5-11 |
| Impulse Buying | 365 | | 359 | | 395 | | 354 | | 333 | |
| Perfect Competitor | 374 | | 356 | | 375 | | 345 | | 400 | |
| Compounding Costs | 374 | | 352 | | 355 | | 338 | | 433 | 5-11 |
| Risk | 370 | | 367 | | 370 | | 331 | | 417 | |
| Parity | 385 | | 364 | | 380 | | 311 | | 366 | |
| Product Differentation | 327 | | 343 | | 340 | | 307 | | 383 | |
| Uncertainty | 313 | | 333 | | 345 | | 300 | | 400 | |

Cooperative
EXTENSION SERVICE
of Kansas State University

"Taking the UNIVERSITY to the PEOPLE"

REPUBLIC COUNTY EXTENSION SERVICE
Courthouse
Belleville, Kansas 66935
Phone: 913 JA 7-5084

TO: County Extension Agricultural Agents, Extension Economists, District Supervisors, and Economists on the Resident Staff at Kansas State University

RE: Economic Concepts Relevant to the County Extension Agricultural Agent in Implementing Educational Change

Dear Colleagues:

Your assistance on the following research project would be greatly appreciated. The purpose of this study is to identify some of the major concepts in the broad field of Economics, which would be useful to the County Extension Agricultural Agent in carrying out the Extension program.

Would you please do the following?

1. Supply the basic information on the following page.
2. Read the 25 concepts listed on the following pages.
3. Indicate how important you feel an understanding of these concepts is to the County Extension Agricultural Agent.
   The scale is: 4 = of major importance
   3 = important
   2 = of some importance
   1 = of little importance
   0 = of no importance
4. Indicate where you feel these concepts can best be learned.

If there are other concepts which you feel are important, please feel free to list them.

Please return the completed questionnaire to me as soon as possible. A self-addressed envelope is enclosed for your convenience.

Thank you for your help and cooperation.

Sincerely,

Richard D. Stroade

Richard D. Stroade
County Extension Agricultural Agent

ECONOMIC CONCEPTS RELEVANT TO THE COUNTY EXTENSION AGRICULTURAL AGENT IN IMPLEMENTING EDUCATION CHANGE

Present Position (check)

__1. County Extension Agricultural Agent
__2. Farm Management Fieldman
__3. District Farm Management Specialist
__4. Other Extension Economists
__5. Resident Teaching and Research
__6. District Supervisor

Number of years since receiving B.S. Degree

__1. Less than 2
__2. Between 2 and 5
__3. Between 6 and 10
__4. More than 10

Have you ever been a County Extension Agricultural Agent?
Yes__ or No__

---

Highest degree held (check one)

__1. B.S.
__2. M.S.
__3. Ph.D.

---

Undergraduate major _____
M.S. major _____
Doctoral major _____

---

Age of Respondent (check one)

__1. Twenty-five or under
__2. Twenty-six to thirty-five
__3. Thirty-six to forty-five
__4. Forty-six or over

---

INSTRUCTIONS

Please read the 25 concepts and situational examples on the following pages. Indicate how important you feel an understanding of these concepts is to the County Extension Agricultural Agent by circling numbers 0 to 4.

The scale is: 4 = of major importance
3 = important
2 = of some importance
1 = of little importance
0 = of no importance

Indicate where you feel these concepts can best be learned, by checking the appropriate blank.

● Concept 1

PERFECT COMPETITOR

Definition - A competitor, who does not buy or sell enough of a product to affect the market.

*Situational Example*

An individual wheat farmer can sell one bushel or all his wheat at the going price. By himself he cannot put enough wheat on the market to change the price of wheat. He is a perfect competitor. The same holds true of most farm products; however, a farmer producing a specialized crop may influence the market in his local area.

Importance of Concept 1 4 0 3 2 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

---

● Concept 2

PRODUCT DIFFERENTIATION

Definition - A difference in design or physical quality of a product compared to that of a competing product.

Situational Example

The farm machine industry is an example of product differentiation. Each make of farm tractor has certain features which make it different than similar farm tractors. Because of these (sometimes very small) differences, the seller gains some independent jurisdiction over his price, relative to the price of his rivals.

*Importance of Concept* 4 2 3 0 1 *(circle one)*

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___

● Concept 3

GOAL

Definition - The end toward which efforts or ambitions are directed.

Situational Example

Goals vary considerable among individuals. An Extension worker, in working with an individual farmer, may develop a farm plan by which the farmer can work 360 days a year and net $10,000.00. The farmer would perhaps prefer to work only 250 days a year and net $6,000.00.

Importance of Concept 3 1 2 0 4 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

---

● Concept 4

RESOURCE ALLOCATION

Definition - The distribution of the available resources in a way that

will maximize satisfaction.

Situational Example

Everyone has certain resources, such as time. Assuming that everyone needs to earn some money and still wishes some leisure, each individual must allocate his time so he can reach this goal.

Importance of Concept 3 0 4 2 1 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

● Concept 5

PARTIAL BUDGET

Definition - The planning or budgeting of an enterprise, when only a small number of segments are taken into consideration.

Situational Example

A farmer, who has extra labor, is considering adding a feeder pig operation. None of his other operation will be changed. When making a budget of his enterprises he needs to consider only the swine operation, as nothing else will change. If it were necessary to discontinue some part of his present operation (in order to add the feeder pig project) he would have to take these opportunity costs into consideration.

Importance of Concept 2 3 4 0 1 (circle one)

Where can this concept best be learned? (check one)

Undergraduate__; Graduate___; In-service Training___; On-the-job Study___;

---

● Concept 6

FIRM-HOUSEHOLD RELATIONSHIPS

Definition - The setting of goals and maximization of satisfaction taking both the firm and the family into consideration.

Situational Example

A farmer, who needs extra volume in his business is considering making a sizable investment in a farrowing house. If he builds this farrowing house it will be several years before money is available for any other larger expenditures. The family home also needs to be modernized. In this case the firm-household relationship will be very important in making a decision.

Importance of Concept 1 0 3 4 2 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

● Concept 7

CHOICE INDICATOR

Definition - The criterion indicating which of two or more alternatives is optimum or will maximize a given end.

Situational Example

> Time is a valuable resource for most people. Nearly everyone has a number of alternatives as to how they will use this resource. Their final decision will depend, to a great extent, upon what their choice indicator is. If their choice indicator is profit maximization, perhaps they will spend all of their time working. If it is maximization of satisfaction, they will spend most of their time in relaxation and recreation.

Importance of Concept 2 0 1 3 4 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

---

● Concept 8

RISK

Definition - The variability of outcomes, which are measurable in an emperical or quantitative manner.

Situational Example

> Insurance companies will insure buildings against loss by fire. The probability that one building will burn can be established for a large number of cases. This is a risk.

Importance of Concept 2 4 0 1 3 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

● Concept 9

UNCERTAINTY

Definition - The variability or outcomes, which cannot be measured in an emperical or quantitative manner.

Situational Example

To an individual farmer it is an uncertainty as to whether or not his barn will burn. He may feed enough cattle to know that his death loss will probably be 1%. This death loss is a risk and can be considered part of his operating costs. He has not had enough barns to be able to predict the probability of his barn burning. This is an uncertainty and cannot be considered part of his costs.

Importance of Concept 1 3 0 4 2 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

---

● Concept 10

IRRATIONAL PRODUCTION

Definition - That stage of production where resources can be rearranged to either give a greater product from the same amount of resources, or give the same product with smaller aggregate outlay of fixed and variable resources.

Situational Example

A farmer has very limited operating capital, and does not think he can afford fertilizer for his wheat. Without fertilizer his 50 acres of wheat will only yield 25 bushels per acre. By applying fertilizer he can obtain a yield of 35 bushels per acre and can get the same total bushels from 36 acres as he previously grew from 50 acres. The expenses saved in not planting the extra 14 acres will more than pay for the fertilizer, even if he does not put the land to an alternative use. He was operating in a stage of irrational production.

Importance of Concept 3 1 4 2 0 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study__

● Concept 11

PARITY

Definition - The price for a particular farm product which gives a farmer the same purchasing power that he had during a specified period called the "base period".

Situational Example

In 1937 a farmer could buy a simple farm tractor for about 700 bushels of wheat. Using 1937 as the base period, he should still be able to buy such a tractor with the same amount of wheat if the wheat price was 100% parity (using 1937 as the base periods).

Importance of Concept 4 3 2 1 0 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

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● Concept 12

FACTOR-PRODUCT RELATIONSHIPS

Definition - The amount and nature of yield or product forthcoming as various quantities of labor, feed, fertilizer, or other factors of production are used on the farm or in other industries.

Situational Example

The relationship between the amount of a factor of production and the return may be constant, diminishing, increasing, or more likely increasing and then diminishing. If the factor in question is land, the return may be constant, providing other factors are not limited. In the case of fertilizer the returns are usually increasing and then diminishing.

Importance of Concept 2 1 4 0 3 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

● Concept 13

PURE INTEREST RATE

Definition - The per cent interest calculated by dividing the credit charge by the average amount of money borrowed for a year.

Situational Example

A family borrows $240.00 for 12 months at 6% interest. At the end of the 12 months they pay the bank $254.40 ($240.00 plus $14.40 interest). The pure interest rate is 6%. If the family had paid the $254.40 in 12 monthly payments $21.20 each, the pure interest rate would have been much higher. They would have owed $240.00 the first month, but only $20.00 the last month or an average of $130.00. Dividing the $14.40 interest charge by $130.00 gives the pure interest rate of 11.76.

Importance of Concept 1 2 3 4 0 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

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● Concept 14

IMPULSE BUYING

Definition - The purchasing of consumer items without prior planning of such purchases.

Situational Example

An individual who goes shopping without a list will probably buy many items (on impulse) that he had not planned to buy. Some of these purchases may be wise; however, many may not be wise purchases. It is estimated that 70% of the purchases in self-service stores are made on impulse compared with 35% made in service stores.

Importance of Concept 4 2 3 0 1 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

● Concept 15

DIMINISHING RETURNS

Definition - As additional units of a variable factor are added, each additional unit of input adds less to the total output than the previous unit.

Situational Example

> Farmer A uses fertilizer on corn. Each additional sack of fertilizer adds less to the corn yield than does the previous sack. He will want to add fertilizer only as long as the last unit of fertilizer is equal in value to the pounds of corn that it yields.

Importance of Concept 3 2 4 1 0 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

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● Concept 16

MARGINAL RATE OF SUBSTITUTION

Definition - The amount by which one resource is decreased as inputs of another resource is increased by one unit.

Situational Example

> A farmer may winter his stock cattle almost completely on alfalfa hay. He may also substitute some grain sorghum for some hay. Assuming he would need 30 pounds of hay alone (per day) to winter a 1,000 lb. cow and that he could use four lbs. of grain sorghum and 20 lbs. of hay, the rate of substitution of grain for hay is 2.5. This substitution rate would not be the same as more grain is substituted for hay.

Importance of Concept 2 4 0 1 3 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

● Concept 17

COMPARATIVE ADVANTAGE

Definition - The advantage in efficiency one has in producing one product compared to another product.

Situational Example

A dry land farmer in Western Kansas can produce wheat more efficiently than corn. He has a comparative advantage in wheat as compared to corn

Importance of Concept 0 1 2 3 4 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

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● Concept 18

MARGINAL PHYSICAL PRODUCT

Definition - The change in total product produced for each unit, change in resource added.

Situational Example

A dairy farmer finds that as he increases the concentrate in the dairy ration, production per cow increases. If all other inputs remain constant, the added milk received from the added unit of concentrate is the marginal physical product.

Importance of Concept 1 2 3 4 0 (circle one)

Where can this concept best be learned. (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

● Concept 19

DISCOUNTING REVENUE

Definition - The process of computing the present value of a future revenue.

Situational Example

A farmer is considering buying a rough farm and planting it all to permanent grass. The cost of the land plus the expenses of planting it to grass is $100.00 per acre. He can sell the land for $125.00 per acre in four years (when the grass is established). Assuming no costs (other than interest) after the first year, the equation is

$V = \frac{R}{(1+r)t}$ V=present value R=revenue at the end of four years r=interest rate t=time

It will not pay to buy the land since the $100.00 invested at 6% will yield $126.00 in four years.

Importance of Concept 2 4 0 3 1 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

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● Concept 20

COMPOUNDING COSTS

Definition - The process of letting cash outlays grow as a function of time.

Situational Example

A farmer plants pine trees which he plans to sell for Christmas trees at the end of six years. He will not receive any revenue from these trees until the end of the six years.
The equation for finding the compounded cost involved is:
$C=c_1(1+r)^n + c_2(1+r)^{n-1} + c_3(1+r)^{n-2}$ ----------$c_6(1+r)^{n-5}$
r=interest rate, n=number of years before a revenue is realized,
$c_1, c_2,$-------$c_6$ =expenses involved each year.
A number of modified equations may be used for other practical business investments.

Importance of Concept 3 4 0 1 2 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

● Concept 21

OPPORTUNITY COSTS

Definition - Value of what is given up when one's resources are used to attain an alternative goal.

Situational Example

> Farmer A's only livestock enterprise is a cow herd. He is exploring the possibilities of a ewe flock. His available land and labor will not permit him to keep both a cow herd and a ewe flock. The income he has been deriving from the cow herd will now be his opportunity costs if he replaces his cow herd with a ewe flock.

Importance of Concept 2 3 1 0 4 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

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● Concept 22

FIXED COSTS

Definition - Costs which do not vary with or are not a function of output.

Situational Example

> The depreciation, insurance, interest, and housing costs of an $8,000.00 tractor are the same regardless of whether the tractor is used to farm 100 acres or 500 acres. These are fixed costs.

Importance of Concept 0 4 1 3 2 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

● Concept 23

COUNTERVAILING POWER

Definition - The market power developed by individuals or groups to become more equal in market power to the large firms with which they must do business.

Situational Example

> Two hundred small sheep producers must market their lambs individually through a commission company or sell direct to a packer-buyer. In either case the farmer is a small producer and has practically no countervailing power. These 200 small producers form a lamb marketing organization and market their lambs together. This organization gives the farmer countervailing power against the commission companies and the packer buyer.

Importance of Concept 2 3 4 0 1 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

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● Concept 24

MARKET STRUCTURE

Definition - The economically significant features of a market, which affect the behavior of firms in the industry supplying that market. The elements of Market Structure are: concentration, product differentiation, barriers to the entry of new firms, growth rate of market demand, and ratio of fixed to variable costs in the short run.

Situational Example

> Firms, which have high concentration, considerable product differentiation, and many barriers to entry (such as farm machinery) will react quite differently than firms with low concentration, little product differentiation and few barriers to entry (such as the fertilizer industry). The latter is quite competitive and has resulted in lower priced fertilizer. The farm machinery industry, though somewhat competitive, has not resulted in lower prices, but is still getting its product sold.

Importance of Concept 4 2 0 1 3 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

● Concept 25

ELASTICITY OF DEMAND

Definition - The relation between the proportional changes in price and quantity demanded, or the relative change in quantity bought resulting from a given relative change in price. If the response in quantity taken is relatively greater than the change in price, the demand is elastic. If the change in consumption is not relatively sensitive to the change in price, the demand is inelastic.

Situational Example

> The price of wheat cannot be lowered sufficiently to sell enough extra wheat to adequately raise the total revenue from wheat. The demand for wheat is relatively inelastic. The demand for a product such as beef is relatively more elastic.

Importance of Concept 1 3 2 4 0 (circle one)

Where can this concept best be learned? (check one)

Undergraduate___; Graduate___; In-service Training___; On-the-job Study___;

Listed below are the 25 concepts in Economics you have rated. Please check the five you feel would be most useful to the County Extension Agricultural Agent. Then rank in order of importance the five you selected (1st, 2nd, 3rd, 4th, 5th).

| Rank | Concept |
|---|---|
| ____ | Perfect Competitor |
| ____ | Product Differentiation |
| ____ | Goal |
| ____ | Resource Allocation |
| ____ | Partial Budget |
| ____ | Firm-Household Relationships |
| ____ | Choice Indicator |
| ____ | Risk |
| ____ | Uncertainty |
| ____ | Irrational Production |
| ____ | Parity |
| ____ | Factor-Product Relationships |
| ____ | Pure Interest Rate |
| ____ | Impulse Buying |
| ____ | Diminishing Returns |
| ____ | Marginal Rate of Substitution |
| ____ | Comparative Advantage |
| ____ | Marginal Physical Product |
| ____ | Discounting Revenue |
| ____ | Compounding Costs |
| ____ | Opportunity Costs |
| ____ | Fixed Costs |
| ____ | Countervailing Power |
| ____ | Market Structure |
| ____ | Elasticity of Demand |

PLEASE GO BACK THROUGH THE SCHEDULE AND SEE THAT YOU HAVE RESPONDED TO EVERY ITEM ON EVERY PAGE

# ECONOMIC CONCEPTS RELEVANT TO THE COUNTY EXTENSION AGRICULTURAL AGENT IN IMPLEMENTING EDUCATIONAL CHANGE

by

RICHARD D. STROADE

B. S., Kansas State University, 1959

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AN ABSTRACT OF A MASTER'S THESIS

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY
Manhattan, Kansas

1971

## ABSTRACT

The purpose of this study was to indentify some of the major economic concepts, which would be useful to the county extension agricultural agent in carrying out the county extension program.

This study was exploratory and descriptive. To the writers knowledge there has not previously been a study made of economic concepts involving county extension agricultural agents. There have, however, been a number of studies made investigating the concept approach both for extension education as well as for other uses.

Data was compiled from a questionaire, which was sent to all Kansas county extension agricultural agents, farm management fieldmen, district extension economists, other extension economists, agricultural economists on the teaching and research staff at Kansas State University, and district extension supervisors.

Twenty-five economic concepts were included in the questionnaire. Of the 156 questionnaires sent, 129 (82.7 per cent) were returned. All respondents were asked to rate these concepts as to their degree of importance and to rank the five concepts, which they felt were the most important.

Respondents were broken down according to present position, number of years since respondents received his bachelors degree, highest degree held, undergraduate major and masters major.

At least four of the position groups agreed that the following concepts were in the top ten most important to the county extension agricultural agent: "goal, resource allocation, fixed costs, diminishing returns, opportunity costs, comparative advantage, marginal rate of substitution and market structure." When considering the highest degree held by the respondent all respondents agreed that the concepts, "diminishing returns, fixed costs, resource allocation, and goal," were among the ten highest rated concepts.

Generally the concepts, which received a high rank also received a high rating.

Two of the most important objectives of this study were to develop a list of economic concepts useful to the county extension agricultural agent and to determine which concepts are the most useful to the county extension agricultural agent. The writer feels that this study has definitely indicated that certain concepts are considered important by the various respondent groups. Six of the concepts are: "resource allocation, goal, firm-household relationships, diminishing returns, fixed costs, and pure interest rates."

The writer hopes that these concepts will prove useful in the training of extension agents in Kansas.